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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,282	10/31/2000	Vadim Gektin	Sun-P5363	2267

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EXAMINER

DUONG, THO V

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 01/14/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/703,282

Applicant(s)

GEKTIN ET AL.

Examiner

Tho v Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 2 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2,3-6 and 8-11 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter of “a plurality of flow dividers extending radially from said pump” must be shown or the feature(s) canceled from claim 11. It appears in the figure 4 that the flow dividers (160) do not extend from the pump because the flow dividers do not originate from the pump. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the claimed subject matter of “a plurality of flow dividers extending radially from said pump” lacks a proper antecedent basis from the specification.

### ***Claim Rejections - 35 USC § 112***

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed subject matter of “a plurality of flow dividers extending radially from said pump” is not supported by the original disclosure. It appears in the figure 4 that the flow dividers (160) do not extend from the pump because the flow dividers do not originate from the pump.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4,6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheon (US 5,731,954) in view of Kosson (US 4,252,185). Cheon discloses (figures 1,4 and 5) a device for transferring of heat away from a heat source (12) comprising a base (7,42 and 50) having a first and second surfaces (7,42); a plurality of fins (44) extending from the second surface of the base, the plurality of fins (44) being integrated with the second surface; a chamber (58,60) disposed between the first surface and the second surface of the base; a divider (62)

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disposed between the first surface and the second surface within the chamber; water disposed within the chamber; a pump (P) positioned within the chamber and proximate an edge of the base; an inlet of the pump being proximate the first surface of the base to receive water in the downstream section (60) of the chamber proximate the first surface; and an outlet (56) of the pump that circulates water within the chamber and over a first surface of the divider through conduits (70,74). Cheon is silent about the pump having a power cord connected to a power source. However, Cheon discloses (column 5, lines 58-65) that the pump (P) has an electric pump motor (M). It is well known in the art that an electric pump has a power cord to connect to a power source to energize the pump. One of the prior arts teaches about using power cord connected between the pump and the power source is a reference to Kosson. Kosson discloses (figure 1 and column 2, lines 31-37) a motor and pump unit (20) has a power cord (32) connected to an external source of electrical energy to power the pump's motor in order to operate the pump. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Kosson's teaching in Cheon's device to power the pump's motor in order to operate the pump.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheon and Kosson as applied to claim 1 above, and further in view of Batchelder (US 6,175,495). Cheon and Kosson substantially disclose all of applicant's claimed invention as discussed above except for the limitations of a fan attaching to the fin and the material of the fins and the base. Cheon further discloses that the wall of the base and the fins are made of material that is capable of conducting heat. Batchelder discloses (figure 8 and column 6, lines 8-14) a heat transfer device that has a base having a cooling chamber (90) and fins (44) of the same material

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integrated and extending from the base wherein the material of the fins is aluminum or copper to conduct heat away from the heat source through the base and the fins by conductivity.

Batchelder further discloses (figure 8) a fan (110) is mounted on to the fins (44) to further increase the heat transfer rate of the device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Batchelder's teaching in the combination device of Cheon and Kosson to conduct heat away from the heat source through the base and the fins by conductivity and to further increase the heat transfer rate of the heat transfer device.

#### *Allowable Subject Matter*

Claims 2 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

The non application of art against claim 11 should not be construed as an indication that the claim contains allowable subject matter.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Golden (US 4,098,279) discloses a therapeutic thermal pack unit that has a divider disposed within a chamber.

Hsiao (US 6,324,058) discloses a power cord connected to a pump.

Seifer (US 4,183,400) discloses a cooling device that has fins integrated on a base.

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Tho Duong whose telephone number is (703) 305-0768. The examiner can normally be reached on from 9:30-6 PM.

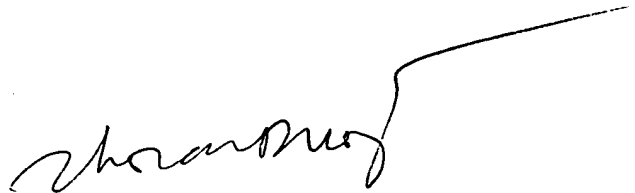
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennet, can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



TD

January 9, 2004



Tho Duong

Patent Examiner.